Letter to the Editor: Prevalence and Risk Factors of Significant Hepatic Fibrosis in Omani Patients with HBeAg-negative Chronic Hepatitis B Virus Infection: A Retrospective Study

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To the Editor,

We read the interesting study by Al-Shuaili et al[1] launched in November 2024 issue of the Oman Medical Journal. On using two-dimensional shear-wave elastography (2D-SWE), Al-Shuaili et al[1] found among 200 Omani inactive hepatitis B virus (HBV) carriers, the following distribution of liver fibrosis (LF): F0 = 142; F1 = 18; F2 = 3; F3 = 31; and F4 = 6 patients. Forty (20.0%) patients had significant LF, defined as stage F2 fibrosis or greater, with a predominance among those older than 60 years (P value =0.024) and males (P value=0.007). Fatty alterations were found to be independent risk factors (P value=0.044).[1] Besides numerous worthy study limitation mentioned by Al-Shuaili et al,[1] we address another worthy one. Irrespective of the etiology, liver biopsy (LB) permits histopathologic assessment of disease-specific morphologic changes. Thus, it helps in diagnosis, evaluation of therapy response, and prognosis. Indeed, LB is employed less commonly than before with the development of non-invasive tools, however, it is still regarded a gold standard to stage and grade numerous chronic liver diseases.[2] Among non-invasive methods, 2D-SWE is accurate and reliable for the LF diagnosis. However, effective use of 2D-SWE necessitates referring to the liver stiffness cut-off values (LSCOVs). Indeed, LSCOVs in patients with HBV infection, utilizing LB analysis as the reference method, have been estimated to be used in research and clinical setups. These LSCOVs were the following: F ≥ 1: 5.92 kPa; F ≥ 2: 7.69 kPa; F ≥ 3: 8.97 kPa; and F ≥ 4: 12.15 kPa.[3] In the study methodology, Al-Shuaili et al[1] stated that they referred to LSCOVs to assess LF, employing transient elastography (TE) as a reference index. These LSCOVs were the following: F0: no fibrosis (≤ 7.1 kPa); F1: minimal fibrosis (7.1–7.8 kPa); F2: significant fibrosis (7.8–8.0 kPa); F3: severe fibrosis (8.0–11.5 kPa); and F4: cirrhosis (> 11.5 kPa).[4] There are noticeable differences in LSCOVs in 2D-SWE based on the two different reference methods. Since LB is the firm standard in diagnosing LF,[2] referring Al-Shuaili et al[1] to LSCOVs based on LB[3] rather than TE[4] as a reference standard could generate more valid results. Irrespective of the study limitations, periodic monitoring of inactive HBV carriers for LF is crucial to improve patients' survival and outcomes.

References

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